DOCUMENT RESUME

ED 025 950 EM 007 058

By-Schramm, Wilbur
Motion Pictures and Real-Life Violence; What the Research Says.
Stanford Univ., Calif. Inst. for Communication Research.
Spons Agency-Motion Picture Association of America, New York, N.Y.
Pub Date Dec 68
Note-53p.
EDRS Price MF-$0.25 HC-$2.75
Descriptors-*Aggression, Audiences, Child Psychology, Fantasy, *Films, Identification (Psychological), *Laboratory Experiments, Literature Reviews, Television Viewing, *Violence

There is evidence that violence in motion pictures viewed by children on screen or television can contribute to violence in real life, although the movies can rarely be blamed as the sole cause of anti-social conduct. Clinical reports cite instances of the effect on "susceptible" youngsters; e.g., emotionally disturbed individuals. Long-term effects of the audiovisual media on the "normal" child are harder to substantiate. Laboratory experiments show that children learn a great deal from movies, and that there is a strong tendency for them to imitate violence even when they feel it is wrong. The doubtful "catharsis hypothesis" explores the idea that exposure to film violence might reduce the level of aggression in a viewer. The implication of accumulated studies is that the more realistic the violence in a film, and the greater the degree of identification between the child and a violent character, the more likely the aggressive learning will be carried over into real-life behavior. This effect might be combated in a number of ways: reduce violence and the number of violent heroes in our movies, demonstrate by them that crime does not pay, and encourage the young viewer to apply "adult discount" to the fantastic situation. (TI)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED 027 020

MOTION PICTURES AND REAL-LIFE VIOLENCE

What the Research Says

A working paper for the Motion Picture Association of America
by Wilbur Schramm
Institute for Communication Research
Stanford University

1. What This Paper Tries to Do*

One of the least pleasant requirements of a paper like this is that it must inevitably focus upon the socially undesirable things to be learned from motion pictures, rather than the desirable ones. It would be more pleasant to write about the latter: the moments of aesthetic brilliance, the human insights, the relaxing laughter, the character models we like to hold up to our children, the flow of information that widens horizons on other people and other places. Motion pictures cannot fairly be

---

*Many people have been helpful in the preparation of this paper and I cannot thank them all here, but I do want to give special thanks to Professor Eleanor Maccoby and Assistant Professor Aimee Leifer for the critical readings they gave the manuscript.

EM 007 058

portrayed as a wasteland of violence and aggression. But there is violence and there is aggression, and the great amount of it is a matter for concern.

There is evidence that violence in motion pictures can contribute to violence, delinquency, and crime in real life.*

However, let us be clear about that.

Complex behaviors like those mentioned have multiple roots. These are deep in the personality of the child, his family life, his school and peer group experience, the values, opportunities, and inhibitions he absorbs from being set down in the world where he is, and -- among other things -- the mass media. It would be most surprising if, in the midst of all these other powerful influences, a symbolic experience such as a movie were ever found to be sole and sufficient cause for the kinds of behavior we have been talking about. Charters recognized this in summing up the Payne Fund Studies of motion pictures, in the 1930's. "To say that movies are solely responsible for anti-social conduct, delinquency, or crime is not valid," he wrote (1935, p. 13). "To assert contrariwise that delinquents and criminals happen to frequent the movies and are not affected by

---

*We are speaking, of course, of the effect of movies used on television as well as those shown in the theatre.

them is clearly indefensible." Berkowitz, one of the chief modern students of aggression, also doubts that the mass media are "major determinants" of delinquency and crime, although he has no doubt that they can contribute to the amount of aggression in human beings and "influence specific actions in specific situations" (1962a, p. 133).

When we speak of the possible effect of movie violence upon anti-social behavior in real life, therefore, we are speaking of a <u>contributory</u> effect, rather than a sole or a chief cause. In our society, of course, even contributing to delinquency is unacceptable. So we have good reason to examine very carefully the evidence available to us concerning the nature, the strength, the sources and conditions of this effect.

What can we say, in general, about the nature of the research that bears on this topic? We must not expect too much. Experiments on such a subject as this one are extremely hard to design and conduct, not only because of the difficulty of unraveling the skein of a life to find the sources of complex behavior, but also because of the moral impossibility of experimenting upon a child as one could upon an inanimate object or a laboratory animal. For example, one obvious strategy would be to try different ways of <u>bringing about</u> delinquency in order to identify the truly active causes and combinations --

which is manifestly impossible in this situation. In a less sensitive area, we should make more of what is lacking in the research; but in this area, considering the necessary inhibitions upon the work, the amount of hard findings and agreement in the research literature is very encouraging. And there is enough centering and enough replication to give us little excuse to reject the research evidence simply because it is not in every respect clear, complete, and certain.

In our judgment it is quite clear, complete, and certain enough to let us reject either of the all-or-none reactions: that, because the implications of the research are not entirely clear, we should not concern ourselves about the effect of motion pictures until we have better guidelines; or that, because movies probably contribute to violence under certain conditions, we should keep children away from them. Rather, it seems to us, we can assume a high probability that, under some circumstances, some films produce undesirable effects in some children. We need to determine as clearly as we can <u>what</u> kinds of films, <u>what</u> circumstances, <u>what</u> children. And then we need to translate this growing understanding into guidelines for policy.

That is the approach of this paper.

2. The Evidence

Three kinds of evidence bear on the effect of motion pictures. There are a number of clinical reports and expert conclusions derived from clinical evidence. There are surveys in which large groups of children are studied in a real-life situation, without trying to

control all the variables that enter into cause and effect. And, thirdly, there are laboratory experiments, in which conditions are controlled and the emphasis is on causal relationships.

Each has its own strength and weakness. Clinical studies go deeply into the roots and patterns of individual children's behavior, but it is not always easy to generalize from the clinical patient to other children. Surveys have the great advantage of covering many children in a life-like situation, but are more useful at describing what is than what caused it. Laboratory experiments can seek out cause and effect, which is what we are chiefly looking for, but sometimes leave us with the nagging question of whether we have identified and handled all the essential conditions, internal and external to the child, that will determine the effect in real life, so that the results can easily be projected back to later real-life situations. Because we cannot know exactly how representative our experimental subjects and situations are, we have to deal in probabilities.

Research on the effects of films blends almost imperceptibly into research on the effects of television, and thus broadens our data base. When "television" is studied in the laboratory, the stimulus is usually a film, sometimes projected on a TV screen. Much of the content seen on television is actually film. The general finding of studies on children's use of mass media (for example, Bailyn, 1959; Schramm, Lyle, Parker, 1961) is that children react in much the same way to films and television. Therefore, we can supplement the several hundreds of studies now available on children and motion pictures (see

Unesco, 1961) with a selection from the more recent literature on children and television (see Unesco, 1964). The first of these Unesco summaries lists 491 studies of children and motion pictures; the second lists 165 studies related to children and television. These totals would be larger if the research were to be summarized now, but many of the studies in the Unesco books are only peripherally related to our present concern. To provide an order-of-magnitude estimate of the amount of research evidence bearing directly on this problem, we can note that the references at the end of this paper list 70 titles. Any investigator seeking an overview of the research evidence on the effect of films on children would probably find that somewhere between 50 and 100 books, monographs, and articles would be central to his concern.

3. What the Clinicians Say

A number of clinical reports on disturbed or deviant children have been able to identify some relationship between the problem and exposure to film or television.

For example, Brini and Redslof (1947) reported a case-history of a girl afflicted with hysterical blindness after viewing a certain film. Bruel (1953) describes a neurosis that arose after a traumatic experience in viewing the film "The Hunchback of Notre Dame". In a number of cases, children who have committed acts of asocial violence have said that they learned how to do them seeing films or television. For example, a housemaid found a seven-year-old boy sprinkling ground

glass into the family's meal in order to find out (so he said) whether it would work as well as it did on television (cited in Schramm, Lyle, Parker, 1961, p. 161; Berkowitz, 1962a, p. 112). In Brooklyn, a six-year-old son of a policeman asked his father for real bullets because his little sister does not "die for real when I shoot her like they do when Hopalong Cassidy kills 'em." (Cited by Norman Cousins, Saturday Review, 24 December, 1949).

Haines (1955) interviewed 100 teen-age prisoners in a Chicago jail, asking their own judgment as to whether television, movies, radio, and pornographic literature played any part in their turning to crime. His conclusion was that "they play a distinct role in the creation of anti-social behavior in susceptible teen-agers."

The last phrase -- "for young susceptible teen-agers" -- is worth noting. In the same vein, when Banay, a psychiatrist, made his often-quoted statement before the Senate subcommittee to investigate juvenile delinquency, that "TV is a preparatory school for delinquency," he added: "for young disturbed adolescents." The susceptibility of the child to undesirable influences is thus an important factor. This is a relatively common conclusion among clinical observers. For example, when Dr. Otto Billig, of Vanderbilt University, testified before the Kefauver Committee on his studies of juvenile delinquents, he reported that "only the emotionally disturbed and insecure individual appears susceptible to such outside forces. Other outside pressures have probably greater significance, such as recognition by neighborhood gangs, inadequate or lack of group activities, etc." (Quoted, Schramm, Lyle, Parker, 1961, p. 165).

Freedman, another psychiatrist, said that the intensity and psychic significance of the child's response to television is likely to be "the reciprocal of the satisfaction he gains in the milieu of his family, school, and friends." (1961, p. 192). He suggested a continuum from slight schizoid tendencies to severe psychosis as predictor of how vulnerable a child is likely to be to undesirable influences from television.

This clinical finding that some children are more susceptible than others to undesirable influence from movies or television is an important one, but limited in two ways. For one thing, we know less than we should like to about what constitutes susceptibility, especially within normal types of personality and in the case of younger children. We have some reason to think that the younger a child is, the more likely he is to be vulnerable to symbolic effects of the kind we are talking about; and we are concerned about effects on children who are not disturbed enough to appear in a psychiatrist's office nor delinquent enough to be hauled into court. This is the second limitation on the finding: Clinicians necessarily work with children who have shown symptoms of disturbance or have done something society considers wrong. Therefore, we should be specially interested in clinical studies of normal children of different ages. And here, unfortunately, we have fewer items to work with.

As early as 1933, Ruckmick and Dysinger were able to demonstrate by psychogalvanic skin responses that "profound mental and physiological effects of an emotional order are produced" even in

well-adjusted children when they view exciting movies (1933, p. 113). There is one study (Preston, 1941) in which an emotional inventory was administered to 200 normal children, and they were also asked for a record of how often they saw horror movies and heard radio crime programs. It was found that the incidence of nervousness, fears, sleeping disturbances, nail-biting, daydreaming, and early sex-interest increased with the degree of addiction to these kinds of movies and radio programs. This presents a chicken-and-egg problem: Are these the common effects of such movies and programs, or do such movies and programs attract a certain kind of child? Needless to say, both in the scholarly literature and the recollections of mothers and teachers, there are many records of fears, sleeping disturbances, and daydreaming, apparently induced by movies. What we really want to know is, what happens later? What is the tenth chapter following? But clinicians are necessarily looking for major psycho-pathological effects, and working outside the normal range; whereas we have reason to wonder what are the cumulative results of minor, perhaps indirect effects, on apparently normal children.

One psychiatrist who does worry about this matter is Glynn. He takes a rather concerned view of the probable long-term effects of the audiovisual media, which he fears will include passivity, dependence, and expectation of a high degree of excitement. "What will be the result of such constant stimulation from such early ages?" he wonders. "Will reality match up to the television fantasies this

generation has been nursed on?" (Glynn, 1956). But it must be admitted that we know practically nothing about the long-term effects of either motion pictures or television against which to check such questions.

The implication of these clinical studies is two-fold: that, under some conditions, undesirable effects undoubtedly follow the viewing of movies; but they are much more likely to happen to some children than to others. In predicting who these "susceptible" children are likely to be, this part of the literature is more helpful in the case of disturbed and delinquent children than of others, and in the case of major effects rather than minor and cumulative ones.

4. What the Surveys Show

Survey techniques have been used more often to study the audiences than the effects of the mass media. Nevertheless, there have been some major studies that have compared large numbers of children who view many movies, with comparable groups who go to movies only occasionally; or children in a television community with children in a community where television has not yet arrived; or the same children before and after they get television in the home. In general, these studies have not revealed dramatic differences between the groups compared.

Shuttleworth and May (1933) compared grade-school children who attended movies four or five times a week with children in the same grades who attended only about twice a month. They found no

significant differences in measures of moral conduct, such as honesty in out-of-school situations, although frequent viewers had somewhat poorer reputations, were regarded as emotionally less stable, and were somewhat poorer students in school. They also tended to be, on the average, <u>better</u> liked by their peers.

Blumer (1933) obtained anonymous "motion picture autobiographies" from 1,823 young people of high school age and older, and about 1,200 papers or interviews from younger children. He found widespread evidence that the memory of motion pictures carried over into children's behavior. Of boys under 12, 75 per cent reported that they had played at impersonating film characters and re-acting film stories -- chiefly films of fighting, police arrests, cowboy and Red Indian, shootings, escapes, and the like. A very common report from the girls, even those as young as 12, was that they had re-enacted love scenes from movies. Many of the girls had adopted dress styles, hair styles, and personal mannerisms from movie stars. Two thirds of high school pupils, half of elementary school pupils, reported that their daydreams were influenced by what they saw in the movies.

Bailyn (1959) studied the mass media habits of about 600 fifth and sixth grade children in New England. She found high correlations between exposures to movies, television, and comic books. Whether a child had personal problems was apparently not related to how much use he made of these pictorial media, but if he had personal problems and also rated high on a test of "rebellious

independence," then he was very much more likely than other children to be a high user of the media. Boys who could be called "rebelliously independent", who got spanked, whose media time was not restricted, and who had low intelligence scores were more likely than others to prefer the "aggressive hero" type of content. Thus the children we should expect to be most likely to behave violently are those who see most of the violent content in the media. There was also some evidence that high users of the pictorial media were likely to think in more stereotyped ways than other children.

Himmelweit, Oppenheim, and Vince (1958) compared large samples of English children, half of them from towns with television, half without television. They found no more aggressive, maladjusted, or delinquent behavior among the viewers than among the non-viewers (p. 215). In some cases, notably in adolescent girls, they found more anxiety concerning the future in homes with television than in homes without television. No significant differences were found in school performance or level of information.

The most extensive American study of television and children (Schramm, Lyle, and Parker, 1961) was able to compare a town that had television with a very similar town in which television was not yet available. They could find no greater amount of delinquency, or significant difference in school performance, in either town, but they did find that children in "Teletown", as they called it, entered the first grade of school with a one-year advantage in vocabulary. Television apparently helped them to a faster start

at language learning. By the time children reached the sixth grade, however, this advantage had disappeared. At that time, the overall information level was about the same in the two communities, but children in Teletown were better at naming singers and band leaders; children in Radiotown (the community without television) were able to name more writers and statesmen.

A recent major study in Japan (Furu, 1962) studied 3,700 third, fifth, and eighth grade children in a Japanese city before television came to the city, and again two years later. Contrary to these other large surveys, he found that children without television made more progress in reading than did other children. There was no significant difference in boys' science and social studies grades in school, but girls scored a bit higher if they had television in their homes. No significant differences were found, before and after television, in paper-and-pencil tests of passivity, escapism, and nervous tendency.

What conclusions can we draw from these surveys? The most obvious one is that the effects of films or television on aggressive behavior do not readily show up in a survey. Many of the effects which experimenters can produce in the laboratory are likely to be inhibited in real life by the norms of the home and the community. The effects which a clinician can detect in a disturbed child are not likely to be identified in a survey. We can easily find evidence of short-term effects (fright, imitation of movie stars, and the like), and we can assume that the middle-term effects (like delinquency) are

likely to occur only on a selective basis and to involve so many other factors in a child's life that an ordinary survey is not likely in many cases to show up their relation to motion pictures or television. What we should like to know about is the longer-term effects of mass media on values and behavior. For example, does constant exposure to a diet of mass media violence have the effect of desensitizing young people to violence -- and make it seem like everyday expected behavior? Hardly any more important questions than these long-term ones could be asked, but none of the surveys, and, for that matter, none of the experiments, presently answer them.

Yet, because it is presently so difficult to see how to design research to obtain truly definitive answers to the question of long-term effects, we must go with the evidence we have. And in that respect we shall find the experiments, to be described in the next section, more helpful than the surveys.

5. What the Experiments Show

a. Learning from film

Perhaps the most impressive finding in the whole mass of research on children and movies is the enormous amount of learning that takes place. We are not now talking about instructional films, where the objective is learning, but about the ordinary entertainment films that are available in theatres or out-of-school television. And from these the amount of learning is truly spectacular.

Holaday and Stoddard (1933) showed 17 commercial films to

more than 3,000 children in different age groups up through 16, and later tested the children on what they remembered. The testing was designed to find out what was recalled both of the foreground of the film -- the actors, their actions, what they said -- and also the information that was acquired about the environment in general as a result of the film, and especially about history, geography, and technology. It was found that a child of 8 could remember three out of every five facts an attentive adult could recall; children 11 or 12 could remember three out of every four such facts; and 15- or 16-year-olds recalled at least nine out of ten. Retested in three months, children recalled on the average about 90 per cent of all the facts they had been able to cite on the day of the first test, which was one day after they saw the film. One of the most interesting findings of this study, from our point of view, is that scenes of conflict, high emotion, and familiar surroundings are more likely than other kinds of material to be remembered.

It is not at all surprising that children should remember the plots, the characters, and even the speeches and scenes of movies that move and entertain them. What is really impressive is the amount of learning that is incidental to the main story content of the film, and the extent to which viewers pick up details from the film and work them into their own value and knowledge systems.

Hale, Miller, and Stevenson (1968) recently conducted an experiment directed at measuring this incidental learning. They showed an eight-minute dramatic skit to 44 children in grades 3

through 7, and to 167 college students. The film was presented, not as a test, but as entertainment -- a "reward" for taking part in an earlier study. Immediately following the test each participant unexpectedly received a booklet which contained 30 questions on details in the film. These details were "incidental" to the main action of the film -- for example, "What was the husband's name?" "What color was the husband's sweater?" "Was the visiting lady wearing gloves?" "What was on the radio?" A great amount of learning of incidental details like this was found to take place. For some reason, girls had higher scores than boys at all grade levels.

Maccoby (1959) found that children were especially likely to remember content and customs portrayed by a character they felt was like themselves or represented a kind of person they aspired to be. Therefore, they often used the movies, consciously or unconsciously, as guides to conduct in future situations in which they expected to find themselves: what kind of wedding gown to choose, how to act on a date, what to expect at college or on a job. Siegel (1958) found that children apparently often learn from movies what to expect of the kinds of people with whom they are not wholly familiar. She exposed two groups of second-grade children to programs presenting a taxi driver in different characterizations -- one aggressive, one non-aggressive. A story completion test showed that those who had seen the aggressive version attributed more aggression to taxi drivers in general, at least when the test story bore some resemblance to the mass media situation.

Peterson and Thurstone (1933) found that school children learn attitudes from entertainment films. They studied children before and after seeing several spectacular films. Even one exposure to some of these films resulted in substantial attitude change; several exposures -- more effect. "The Birth of a Nation" induced much less favorable attitudes toward Black people; "All Quiet on the Western Front" strengthened anti-war attitudes; "The Criminal Code" induced attitudes against current systems of punishment. Many of these changes persisted when tested as long as 19 months after the film was seen.

It is worth noting that both Siegel, and Peterson and Thurstone, used a number of subjects who might be called fairly naive -- that is, they came from small towns and were unfamiliar with the areas and the kind of action portrayed. This may have been one reason for the very large effects. It is somewhat disquieting, however, to recall that most children come to violent films and television "fairly naive" to that sort of social behavior, and therefore more vulnerable than usual to whatever learning or attitudes the programs may offer.

There can be no doubt, in any case, that children learn a great deal from movies. They learn facts, roles, fashions, customs, what to expect of other people and of situations in which they are likely to find themselves. They learn attitudes and values. They learn no more than adults from a given film, but the experience comes to them in the years when they are filling their storehouses with the maps of the world and the guides to conduct that will lead them through

their lives. If they see, over and over again, wrongs being righted outside the law, will they learn that this is how it has to be done? If they see a succession of fights and shootings, will they not learn something about physical violence and handling a gun? If they are exposed continually to a diet of realistic violence on film and TV, may they not come to regard violence as an ordinary part of life?

An interesting series of experiments has tried to answer these questions directly by studying the conditions under which a viewer would imitate aggressive behavior he has seen in a film. It is easy to object to experiments like these that they do not furnish definitive guidance as to what the child is likely to do outside the laboratory.* For example, when an experimenter finds that a child is likely to imitate aggressive doll-play he has seen on a film, that does not constitute clear evidence that a child would imitate a shooting or a knifing if he saw one on film. (There is, however, some evidence that one kind of violence learned from a film will be generalized to other kinds; this will be presented later.) It is also pointed out that the experimenter does not discourage the child from playing aggressively, whereas in real life, a child may not be able to get his hands on a gun when a situation seems to invite violence, and will probably think twice about the legal consequences before putting into effect any criminal techniques he has learned

---

*Representatives of the television industry have been quick to point this out. For example, see Klapper (1968).

from films. This is true, and helps to explain why the violent acts in films and television are not more frequently imitated directly in life. But the amount of aggressive learning revealed by the experiments we are about to describe shows how much strain is being placed on these social sanctions.

Bandura, Ross, and Ross (1961) let one group of children observe an adult hitting and kicking a bobo doll. Another group saw the same adult engage in non-aggressive play with the doll. After this experience, the children were put into a room with the same toys they had seen in the demonstration. The children who had seen the adult beating up the bobo, imitated him with gusto; the ones who had seen the non-aggressive behavior were much less likely to hit the bobo, and played less aggressively generally. The children who had seen the aggressive film were more likely than others to select a toy gun to play with from among the available toys, even though no guns had appeared in the film. Thus the aggressive effects of the film were not confined to direct imitation, but also aroused aggressive acts that the child had previously learned to perform. Another disturbing result of this experiment was that most of the children <u>said</u> they disapproved of the aggression they saw on the screen, and yet copied it. Obviously, sometimes it takes more than knowledge of social sanctions to control the expression of what has been learned.

A study by the same experimenters (Bandura, Ross, and Ross, 1963) later sought to find out whether it made any difference if the

children saw the demonstration live or on film. One group saw the adult treat the doll aggressively on film; another group saw it live; a third saw non-aggressive behavior. There was no difference between the behavior of the group who saw the live and the one that saw the symbolic behavior, and both behaved more aggressively than the control group.

Bandura and Huston (1961) tried to find out whether children were more likely to imitate a model they liked. They put two groups of preschool children through contrasting experiences with the same model, in one of which he behaved aggressively, in the other not. Children imitated the model more closely if they had previously had rewarding experiences with him. However, the part of the model's behavior that was aggressive was readily imitated <u>regardless</u> of the relation of the children to the model. The implication is that the tendency of children to imitate violence is very strong, and that, while other classes of behavior may not be imitated from a film because the child has no real-life relationship with the model, aggression will be, because it does not require such a relationship.

Hicks (1965) tried to find out more about what kind of model in the film would be most likely to be imitated. Children, 41 to 76 months in age, were divided into four groups and shown different versions of an aggressive film in which the model was either a male or female adult, or a male or female child. Each subject was then observed for 20 minutes in an experimental playroom, and the aggressiveness of his play was scored. Six months later the child

was observed and scored again. Even from this single viewing, a great deal of learning persisted. Results indicated that the male peer had the most immediate influence in shaping the children's aggressive behavior, but that the adult male had a more lasting effect. It may be that the adult is viewed as giving the most important information about violence for long-term use; after all, most violence is by adults.

Lovaas (1965) tried to discover whether violence seen in a film would generalize to other kinds of violence. (There were already indications of this in the Bandura work.) He showed young children an aggressive cartoon film, and then gave them the choice of playing with either of two toys, one of which was a great deal more aggressive than the other. By choosing one of the toys they could press a lever and make two dolls hit each other; with the other toy, they could press a lever and make a ball go up and down in a cage. Note that these toys were quite different from what the children had seen in the film. But, even so, the children who had seen the aggressive cartoon were much more likely than children who had seen a non-aggressive cartoon to choose the more aggressive toy.

Along the same line, Mussen and Rutherford (1961) found that the experience of seeing an aggressive cartoon made children more likely to say aggressive things. Walters and Llewellyn Thomas (1963) used an ingenious way of measuring aggression that was completely different from anything in the films. They gave their experimental subjects (who were adolescents and young adults) the opportunity to

administer electric shocks to an individual they did not know. It was a hoax, of course; one electrode was disconnected, and the supposed victim got no shock at all. But the subjects were given to understand that the longer they pressed a button down, the stronger the shock would be. The shock was disguised as a punishment for wrong answers in a quiz. Whenever the "victim" gave a "wrong answer" (or what the subjects were told was a wrong answer) he was to be punished with a shock. Nothing was said about how long the shock would be: that was up to the subject, and supposedly would reflect his own aggression or his own learned behavior with no guidance from the supervisor of the experiment. The question, then, was whether experimental subjects who had seen a film of adolescents fighting with switch-blade knives (from "Rebel without a Cause") would consistently give longer shocks than a control group who had seen an educational film showing adolescents engaged in art work. The answer was that the young people who had seen the more aggressive film gave, on the average, much longer shocks than the young people who had seen the educational film. This seems to indicate that the imitation of filmed aggression is not restricted to young children (as in the Bandura experiments). Nor is it restricted to exactly the same kind of aggressive behavior that one sees in a film. Nor is it restricted to harmless toys like the bobo. It may be transferred to what the viewer believes is behavior that actually hurts people.

b. Reducing or heightening aggression

A number of experiments have been done to explore the attractive idea that exposure to film or television violence might, under some circumstances, actually reduce the level of aggression in a viewer. This "catharsis" hypothesis has considerable basis in psychological and psychoanalytical theory. If an individual can express some of his aggression, he lets off steam, so to speak -- reduces the pressure to behave aggressively. If it could be proved that one gets the same result vicariously by watching film or television content in which people behave aggressively, then our idea of the effect of violence in the media might have to be considerably revised: rather than being harmful, it might actually have a therapeutic effect!

The investigator who has given the most effort to this line of study has been Feshbach. In 1955 he demonstrated that an adult who had been angered before the experiment would lower his aggression scores if given a chance to express his feelings in fantasy behavior -- in this instance, by writing stories based on a TAT picture. The effects were not great, but they raised the question of whether merely observing fantasy, rather than producing it, would have the same cathartic effect on aggression.

In 1956, Feshbach attempted a similar kind of experiment with children but was unable to replicate the results he had obtained from his adult sample. He himself raised the question whether the effect he had gotten was not catharsis, but rather the arousal of

guilt or anxiety that inhibited subjects from admitting their aggressive feelings. It would be expected that adults would have learned more about social norms and sanctions and thus more easily produce the anxiety reaction than would children. Hence the positive findings with the adult sample only.

In 1961, Feshbach exposed another adult sample to a movie of an aggressive prize fight. He angered half his subjects to build up their levels of aggression, then showed one group of the angered and one group of the non-angered subjects the prize fight movie, and the other subgroups an educational movie about rumor transmission in a factory. He found that the subjects who had been previously angered expressed less aggression (on an "aggressive word association test") after they watched the prize fight movie than did the other half of the group who had seen the educational film. The subjects who had not been angered showed the opposite trend: They became more aggressive after seeing the aggressive movie than after seeing the non-aggressive one. It should be noted, of course, that they were expressing aggression verbally, rather than physically. The implication seems to be that for subjects who have had their aggression raised immediately before seeing a film, the vicarious experience may reduce aggression. Those not angered before exposure, learn some aggression from the film and probably behave more aggressively than before, if they have a chance to do so.

In still another study, reported in 1956, Feshbach and Singer tested the catharsis hypothesis in a very realistic setting. They

studied 665 boys, 10 to 17 years old, in seven institutions -- three private schools, including one military school, and four children's homes. The subjects were randomly assigned to one of two television "diets". One of these contained a high proportion of aggressive programs; the other contained almost no aggressive programs. Each boy was required to watch at least six hours of television each week, and more than this if they wished but all their viewing had to be from their own "diet". Paper-and-pencil measures of hostility were obtained before and after the experiment, and cottage supervisors rated the behavior of each boy daily. Thus this experiment was different from Feshbach's 1955 and 1961 studies in three important ways: It was in a realistic setting, it contained a measure of aggressive behavior in a realistic rather than a laboratory setting, and it used children and adolescents rather than adults.

The result of this experiment was that in the children's homes, though not in the private schools, the cottage supervisors found aggressive behavior more frequent among the boys who saw non-aggressive programs than among those who had the aggressive "diet". This same effect appeared in all the age groups that were tested, and was greatest among boys who had initially been above the average on questionnaire measures of hostility.*

---

*Bailyn (1959), Riley and Riley (1954), and Schramm, Lyle, and Parker (1961) found that children who are hostile and rebellious, and who have unsatisfactory home and peer group relationships, are more likely than other children to seek aggressive fantasy in the media. One interpretation of this is that they find they are thus able to rid themselves of some of their uncomfortable aggression without having to face social sanctions. But other interpretations are possible, also.

This very interesting experiment, carried out as it was in a setting that made conditions extremely difficult to control, will undoubtedly be the subject of much attention, interpretation, and perhaps replication, in the next few years.

Other researchers have not had much success in trying to confirm these results with children. Siegel (1956), for example, found no significant differences in the play of nursery school children after watching an aggressive or a neutral film. The group who saw the violent film were actually somewhat more aggressive than those who had seen the neutral film, but not significantly so. Emery and Martin, in Australia (1957), found no decrease in aggressiveness, as measured by the Rosenzweig picture-frustration test, after viewing a violent western film. Heinrich, in Germany (1961), showed story films with either aggressive or neutral content to 2,250 children who ranged from 11 to 16 years of age. The films with dominant aggressive content increased aggressive attitudes, especially if the films were realistic and dynamic, and if they contained a character with whom the viewers could identify. Only one film of any kind reduced aggressiveness (which was measured by Thurstone scales). This was a film which encouraged identification with harmonious relationships and happy, non-aggressive behavior.

Hartman (1965) tested the possibility that the difference between Feshbach's results and some of the others might result from the fact that Feshbach had angered his experimental subjects immediately before they saw the film. Hartman studied 72 male

delinquents in an institution. Half of them were insulted and angered by the experimenter before they saw the film. Then the angered group and the group that was not angered were each in turn divided into three sub-groups, and shown one of three versions of a film of boys playing basketball. Version A was an active but not especially violent or aggressive game of basketball. Version B showed the same boys playing basketball, but the action worked up to an argument and a fist fight, focusing on the hitting, kicking, and aggressive remarks. Version C, with the same boys, and the same basketball game, also worked up to a fight, but focused on the punitive qualities of the fighting, especially the fighters' pain reactions as they were hit.

The catharsis hypothesis would have predicted that among the angered viewers, at least, there would be greater reduction of aggression in those who saw the more aggressive versions than in those who saw the less violent one. Results were against this hypothesis. Hartman used the same method as Walters and Llewellyn Thomas (1963) to measure aggressive behavior without giving the subjects any chance to imitate behavior directly. It will be recalled that this was a technique that let subjects suppose they were giving electric shocks to an individual they did not know; the length of the "shock" was used as a measure of their aggressive feeling. The result was that subjects who had witnessed either of the more aggressive versions (B and C) behaved more aggressively with the shock button than did subjects who saw version A. Subjects

who were aggressively aroused before the films responded more punitively afterward than did the subjects who were not aroused. Among the subjects who had been angered, the response was more punitive among those who had seen the very punitive version (C) than those who had seen the other aggressive version (B). Thus it looks as though the film was arousing sadistic feelings, as well as simple aggression.

Doob (1967) obtained results that partially supported the catharsis hypothesis, though not with film or television. Using college freshmen as subjects, he arranged for half of them to be annoyed in order to raise their level of aggression before the experiment. Then he let half of the annoyed and half of the not-annoyed group watch the experimenter giving "electric shocks" to a confederate of the experimenter, who was supposed to be punished for each wrong answer he gave to a quiz. The equipment was arranged as in the other shock experiments we have mentioned, and actually no electricity passed through the circuit, although the subjects thought they were giving real shocks. Later, all the subjects -- those who had seen the shocks given and those who had not -- were allowed to administer the shocks themselves. The experimenter told them when the confederate had "missed" a question and invited them to punish him. The catharsis hypothesis would predict that the experimental subjects who had seen the experimenter behaving aggressively in shocking the person he was "testing" would have reduced some of their aggression vicariously and would therefore behave less aggressively

than the other subjects when given a chance to administer the shocks themselves. But the reverse happened: those who had seen the shocks given, actually themselves gave longer shocks than those who had not seen it before. It would seem easier to explain this behavior as learning from seeing aggression rather than catharsis. However, Hartman gave a test of how much the subjects liked the person they thought they had shocked. Of course, they did not know this individual, and their liking or disliking of him was not due to any experience before the experiment itself. The subjects who had given longer shocks tended to "like" the victim better (as measured by paper-and-pencil tests) than those who had taken out less aggression on him.

The implications of this experiment seem to be two-fold. Viewing aggressive behavior will result in a viewer expressing more aggression (at least as measured by the shock test) whether or not the viewer has been angered before he sees the aggression. This is contrary to the catharsis hypothesis. On the other hand, if a subject has been angered immediately before the experience of seeing aggression, he will <u>feel</u> less hostility after expressing it in behavior. This latter finding goes along with the catharsis hypothesis, but has nothing to do with <u>vicarious</u> expression through watching a film.

A series of relevant experiments and reviews by Berkowitz and his associates* have produced no support for the catharsis idea.

---

*Without going into details here, it is worth noting that Berkowitz and Bandura approach this topic on different theoretical paths -- one by studying the aggressive drives involved, the other by measuring the amount of social learning that occurs. It is interesting that they come out with about the same results.

Working with college students, as did Feshbach in his earlier experiments, Berkowitz and Rawlings (1963) provoked and angered an experimental group of subjects, then showed them a film of a prize fighter being beaten in the ring. They told half the subjects that the victim of the beating was a "downright scoundrel" in order to find out whether justifying the aggression would help the subjects to rid themselves vicariously of their own aggression. In neither group was there any decrease in aggression; and justifying the violence actually <u>increased</u> the aggressive feelings of those who saw the film.

Berkowitz, Corwin, and Heironomous (1963) replicated the previous experiment with the addition of several additional elements, including a control group who saw a non-aggressive film. The results were as before: The subjects who expressed the strongest hostility (in a test of attitudes) against the researcher who had angered them were those who had seen the justified aggression; those who expressed the least hostility were those who had seen the non-aggressive film. These findings, say the authors, "offer little comfort for those who contend that fantasy aggression necessarily has socially beneficial effects. Rather than providing an easy and safe outlet for the pent-up hostility within the angered members of the media audience, film violence may well increase the probability that someone in the audience will behave aggressively in a later situation. . . . Should the fantasy aggression appear socially justified -- for example, when a villain is defeated aggressively the consequence may be a weakening of restraints against hostility in angered audience members; they may

be more likely to believe it is permissible to attack the 'villains' in their own lives, at least during the time immediately following the movie." (p. 229).

In a major review of the evidence on the effect of media aggression (1962a) Berkowitz emphasizes this same conclusion. He says that violence in television and movies can affect aggressive behavior in at least three ways: (1) by teaching techniques of aggressive behavior; (2) by arousing previously learned aggressive habits; (3) by encouraging the viewer to regard some of his own hostile wishes as being morally justified. "While it may be," he says, "that television, movies, and comic books will excite anti-social conduct from only a relatively small number of people, we can also say the heavy dosage of violence in the media heightens the probability that someone in the audience will behave aggressively in a later situation." (p. 134).

In this area of the research, therefore, the results are reasonably clear, with the important exception of the Feshbach-Singer study. Most of these experiments do not leave us very confident about how much real-life aggressive behavior will result from exposure to aggressive films, although in some instances (e.g., Hartman, 1965) the subjects clearly <u>thought</u> they were engaging in real-life aggression. From the evidence before us, we must conclude that some viewers, under some conditions, may be able to reduce their levels of hostility by participating vicariously in movie or television violence. Yet there is more evidence against that conclusion than for

it, and many more experimental cases in which vicarious exposure to violence has raised a viewer's level of aggression. Feshbach himself says, "Since single experiments are rarely definitive and since alternative interpretations of these data are possible, it would be inappropriate to advocate, on the basis of the above findings [the Feshbach-Singer experiment] that aggressive boys be encouraged to watch aggressive television programs" (1968, pre-print, p. 218). This responsible conclusion is one that we can apply equally as well to motion pictures, and to girls as well as boys. And it must be noted also that the burden of the evidence from Feshbach as well as the other researchers is that if we are dealing with viewers who are not especially aggressive, then exposure to aggressive media content will be likely to make them more aggressive.

c. Minimizing aggressive effects

How can we reduce the probability that aggressive behavior on film will stimulate aggressive behavior in real life? There is some evidence which we can make use of, even though we may not understand every detail of the effect dynamics themselves.

Berkowitz (1962a) suggests that the probability of media aggression evoking hostile behavior in later situations is directly related to four elements in the situation:

(1) The strength of the viewer's pre-existing aggressive habits, which might be evoked by aggressive content in the media.

(2) The intensity of the hostile tendencies elicited within the observer by the fantasy violence.

(3) The degree of association between the fantasy situation and (a) the situations in which hostile habits were previously learned, and (b) the post-fantasy settings which might provide the occasion for violent behavior. In other words, how realistic is the filmed violence, seen against the viewer's own life?

(4) The intensity of the guilt and/or aggression-anxiety aroused by the media violence. Does the film encourage the viewer to behave violently, or remind him that such behavior might have unpleasant consequences?

Film makers are unlikely to be able to control the first of these factors: The viewer's aggressive habits grow out of his life experience and come with him to the motion picture theatre. But something can be done about the other three.

Is there some way to reduce the aggression learned from a film?

One useful finding in the research is that children are much more likely to imitate the behavior of a character with whom they can identify -- a character in whose place they can imagine themselves, or for whom they feel a deep interest and affection. Ruckmick and Dysinger (1933) when they studied the emotional reactions of children to films, found their strongest reactions when the child felt he could identify with the film character. Maccoby and Wilson (1954) found that a child remembered more of the character with whom he identified, especially if it were a character in a situation which paralleled or illuminated a child's own need. Maccoby, Wilson, and Burton (1958)

were able to show that when no characters except hero and heroine were on the screen, young men in the audience (contrary to what might have been predicted!) spent more time than did young women in the audience looking at the hero in the picture, while the young women spent more time looking at the heroine. Schramm, Lyle, and Parker (1961) found that young children responded strongly to any threats of violence against Lassie, whom they could imagine as their own pet; and were more frightened of violence with knives (which they could see and touch at home) than with guns (which were less familiar to them).

Other experiments (for instance, Bandura and Huston, 1961) have shown that children will imitate a certain amount of aggression whether it is by one of their favorite characters or not, but the implication of these latter experiments is that the violence is more likely to be learned if it is practiced, or at least involves, someone with whom they strongly identify. By the same token, socially acceptable behaviors are also more likely to be learned if practiced by a character with whom the viewer strongly identifies. Therefore, we can assume that the amount of resulting violence can be controlled to some extent by controlling the screen part given to characters with whom children are likely to identify.

The age of a child also has something to do with the intensity of the effect of film violence. A number of researchers have noted that children develop "adult discount" as they grow older. They learn to look at some films as "only a story", and are less likely to be

emotionally affected by them. Even so, however, they are no less likely to learn any details which are relevant to them.

Brodbeck (1957), for example, reports that a western film had considerably more impact on young children than on older ones. Similarly, Ruckmick and Dysinger (1933) found that "the younger the child, the more he appreciated and emotionally responded to the separate items in the film, and the less he appreciated or even assimilated . . . the moral or ultimate outcome of the picture" (p. 116).

Maccoby and Hagen (1965), and Siegel and Stevenson (1966) have found that a child remembers more from a given experience as he grows older, up to a certain age, after which he remembers less as he grows older. Hale, Miller, and Stevenson (1968) found this same learning curve by age, in connection with an entertainment film. The interesting point of their findings is that the peak of the curve -- the age at which the amount of learning from films is proportionately greatest -- comes usually before adolescence, at about the age of 11 or 12. And Roberts (1968) found that the younger the child, the more likely he is to be susceptible to an audiovisual message designed to change his attitude.

Therefore, there is good research evidence to back up clinical reports and mothers' worries, that violence in film or television is more likely to affect young children than older ones. It does make a difference what films are seen by a child of a certain age.*

---

*The reluctant conclusion of the Payne Fund studies (see Ruckmick and Dysinger, 1933, p. 115) was that "the restriction of certain pictures by ages seems to be specifically supported, provided such restriction is made by understanding critics."

What is the result of controlling the realism of a film which contains violence?

A great many of the experiments we have discussed have put the child into a situation similar to that of the film in order to see how likely he was to imitate the violence in the film. For example, he is given a bobo doll to see whether he would treat it as he saw it treated in the film, or he is given a chance to administer a shock to a person he has seen the experimenter shock, and so forth. This is, of course, not the way that most of the child's invitations to violence in real life will occur. The situations, the instruments, the targets of violence will probably be different from those he has seen in films.

Bandura (1961) and Maccoby (1964) are able to illustrate that the likelihood of transferring fantasy aggression to real-life aggression is greatest when the situation in the film is most similar to the situation in which the child is likely to have an opportunity to practice aggression. If the instruments of aggression seen in the film are likely to be readily available to the child, this should increase the probability that they will be used. Berkowitz (1962a) points out that if film violence occurs in a situation or setting familiar to a child, then it is more likely than otherwise to evoke any aggressive habits that the child has acquired in that setting. In another paper (1965) he concludes that when the target of violence in the film can be associated with a possible target in the life of a child, that, too, will increase the likelihood of the violent behavior

being carried over into real life. Feshbach (1965) distinguishes between the "message of reality" and the "message of fantasy": If a child can interpret film violence as fantasy, he will be less likely to copy it than if he sees it as reality. This, as we have seen, is partly due to his age and the extent to which he has developed adult discount; but it is due partly also to the realism of the film and its relation to his experience.

The implication is that the more realistic the violence and the characters in a film -- the more likely that the film situation or people who resemble the film characters will recur in the life of a child -- the more likely the aggressive learning or impulses from the film will be carried over into real-life violence. Therefore, fantasy aggression, clearly fantastic characters, unreal situations, are apparently less likely to stimulate aggressive behavior than realistic aggression in realistic situations.

How can violence be treated so as to discourage violent behavior?

One of the oldest content guides for movies and television is that "crime should not pay." This is supported by the evidence, but the rule takes some interpretation.

The outcome of violence in a film does make some difference. Bandura, Ross, and Ross (1963) found that children were more likely to imitate an aggressive model when he was rewarded than when he was not. Brodbeck (1955) reports an experiment in which levels of aggression in children rose markedly after they had seen a cartoon

story in which the villain was not punished, and another experiment in which the same effect occurred as the result of a film in which the hero was morally right but did not win. Therefore, there is reason for believing that "crime should not pay."

But how about pro-social aggression? Marshall Dillon shoots lawbreakers. A private eye, with smoking gun, enforces the mores outside the law. Does this "justified" violence induce more or less aggression?

We have already seen (for example, Berkowitz and Rawlings, 1963) that viewers actually exhibited more aggression when the violent behavior in a film was justified -- for example, when the man being beaten up was described as a "thorough scoundrel". Justifying the violence took away any guilt the child might have felt about it.

Albert (1957) tested three versions of a Hopalong Cassidy film -- one in which the "good guy" won, another in which the "bad guy" won, and a third in which neither Hoppy nor the villain was victorious. The children showed more aggression after seeing the version when Hoppy won -- again apparently because this roused no guilt or anxiety in them. The violence was justified.

Therefore, transferring violent behavior from villain to hero is a dubious way to interpret "crime should not pay." Evidence at hand indicates that it is important to show unpleasant consequences for violence, if children are to be taught that real-life social violence is not a good thing to practice. Needless to say, it is

also important to show these consequences in the closest possible conjunction to the violent behavior. There is nothing to be gained by showing attractive heroes practicing violence and enjoying their power for most of a film, only to fall victim to the law or fate in the last two minutes.

Of course, the film maker is not solely responsible for teaching children that aggression can have bad consequences. That responsibility is shared by parents, teachers, and all the other figures who are in position to influence and guide the child. Experiments and clinical reports show that it is important for the child to be given guides to the limitations on aggressive conduct. But it is worthy of note that when experiments were designed (Hicks, 1965, and Hicks, 1968) so that an adult would appear with the film and either approve or disapprove the film violence as it occurred, the children expressed their learned aggression much more freely in the situation which he approved. Therefore, the social consequences of social violence should never be very far from the depiction of the violence itself, if we want to inhibit the transfer of such violence to life.

6. Some Guidelines

Let us now try to sum up.

From the evidence at hand, we must assume that this amount of violence is probably having a social effect.

The evidence is not in every respect clear, and some of the important questions have not been answered -- notably questions about the long-term effects of violence in the mass media. And there is nothing in the existing evidence to prove that violence in motion pictures or television is sole and sufficient cause for anti-social behavior in real life. The effect is rather a specialized and statistical one, as Berkowitz has described it -- "the heavy dosage of violence in the media heightens the probability that someone in the audience will behave aggressively in a later situation" (1962a, p. 134).

On the other hand, there is nothing to make us believe that the effect of media violence is a matter of no social importance. The impressive evidence on how much children learn from entertainment films, the clinical reports, and the numerous laboratory studies in which aggression has been increased and aggressive behavior encouraged

by viewing aggressive films -- these are clearly matters of concern to us.

In other words, there is little in the research that would tell us to push the panic button, but even less that would encourage us to relax with this problem, or to hope that it would go away. Rather, we are obligated to do something about it if we can. The question is, what?

The basic problem is the amount of violence available to children on television and in movies. If there were only occasional violence, we could afford to be less concerned than we are about the long-term effects of such a diet, and could indeed relax with the problem in confidence that social norms and family guidance would take care of it.

We are correct in reminding ourselves that movies are not the chief influence on children; nor, for that matter, is television. Parents and other people who are influential in the life of the child can do a great deal to keep bad effects of media violence from showing up. They can give the child counter-norms, counter-ideas, a clear concept of the unpleasant consequences of violence. They can reduce the child's frustration and rebelliousness by providing secure and humanly warm homes, as well as by guiding him away from the tools of violence. Children that show signs of hostility, withdrawal, maladjustment, or addiction to television or movies, need special attention. And parents can also guide young children away from too many movies or too much television, especially too many violent movies or programs.

On the other hand, how much can we expect parents to add to their already almost intolerable burdens of raising their children -- faced as they are by the problems of drugs, rebellion in sex mores and politics, and a spreading generation distrust?

We are quite correct also in reminding ourselves that violence is very popular both with adult audiences and children. This raises the disturbing question of a free market of taste: Should not film makers and television producers and advertisers be free to make as much money as they can by presenting goods that will attract as many people as possible? This is not the place to argue that question, except to point out that a completely free market is not socially acceptable in other goods which may be harmful -- drugs, for example. The question that should challenge film makers is not the question of freedom to make the films they want to make, and exhibit them where they are not against the law and where a sufficient number of people want to see them -- that right is not challenged -- but rather the question of whether the film industry, with its enormous talent and creativity, cannot find ways to attract young viewers without resorting to repeated and ugly violence?

The best thing would be less violence -- just as good films, but less violence in them. The best thing would be a shift in emphasis to wholesome, affiliative, non-violent values, represented by models at least as attractive as the tough guys we have now.

But supposing that there is going to be violence in films and that some of these will be available to children, what can film

makers do to minimize the chance that this experience will stimulate violence in real life? Throughout the preceding pages, we have been noting some such guidelines from the research evidence, and can sum up a few of them here. All these play a part in the real-life effect of filmed violence, and all are to some degree within the power of the film maker to control.

(1) There is little doubt that the young child is particularly susceptible to screen violence and to learning whatever behavior and values are shown on the screen. Therefore, the younger the audience that a film is likely to attract, the more careful the film maker should be about what kind of models for behavior he presents.

(2) The child's ideas of the consequences of aggression are likely to have much to do with whether he transfers aggression to his real-life behavior. Therefore, if aggression is to be a significant part of a film, negative consequences should be shown immediately after the act so that the child associates them with it. How often do we give young viewers an idea of the suffering and sorrow and ugliness that accompanies violence? How often do we merely shoot the actors down as if the consequences of gunplay were no worse than a man in a horizontal position? How often do we show the exciting parts of crime in detail and give only lip-service to the less exciting events that really show how "crime does not pay"?

(3) If we do not want children to learn violent behavior, we should probably give up the idea that it is not dangerous to present pro-social violence. All the evidence shows that letting

the "good guy" beat up the "bad guy", or the sheriff shoot the criminal, serves merely to take away the guilt and inhibition from violent behavior in life. It is too easy for a child to excuse his own violent behavior by thinking that it is justified.

(4) If aggressive models are shown, they are less likely to be imitated if they are low in prestige and unlike the viewers -- either the viewers at present or as they aspire to be. And it is reasonable to think that high-prestige models, models with whom the child identifies, are quite likely to be imitated if they engage in non-aggressive behavior. One of the most useful kinds of content that films could present would be models for alternatives to violent responses. The gripping scene in "To Kill a Mockingbird" when Atticus walks away from a fight, despite the fact that he had already proved himself the best shot in town, despite the fact that a no-good had spat in his face, despite the fact that his own son Jem was watching and wanting his father to thrash the other man -- the fact that he could walk away and still keep the respect both of his son and the audience is the kind of dramatic alternative I am speaking of. A few more like that, rather than the simplistic solutions in violence, would make a difference.

(5) The less realistic the film violence is, the less it is placed in a situation or setting where a child is likely to find himself, the less it is directed against a target for which the child might later find a counterpart -- the less likely it is to be imitated. Thus a realistic film like "The Birth of a Nation" has

been shown to have taught children extremely unfavorable attitudes toward Black Americans, and it would be most unlikely if those attitudes were not reflected in real-life behavior by children, just as they must have given some impetus among adults to the revival of the Klan. Therefore, one helpful tactic would be to make a violent film (if it is necessary to make a violent film) in such a way as to encourage the young viewer to apply "adult discount" -- that is, to provide the cues that help him say to himself, "It's only a story!"

REFERENCES

1. Albert, R. S. The role of the mass media and the effect of aggressive film content upon children's aggressive responses and identification choices. Genetic Psychology Monographs, 55 (1957), 221-285.

2. Albertini, Laura, and Caruso, Ada P. Percezione ed interpretazione di imagini cinematographiche nei ragazzi. (Perception and interpretation of film images by children.) Bianco e Nero, 10 (1949), 9-27.

3. Bailyn, Lotte. Mass media and children: a study of exposure habits and cognitive effects. Psychological Monographs, 73 (1959), 1-48.

4. Banay, R. S. Testimony before the subcommittee to investigate juvenile delinquency, Committee on the Judiciary, U.S. Senate, 84th Congress. S. Res., April, 1955, 62. Washington, D.C.: Government Printing Office.

5. Bandura, Albert, and Huston, Aletha C. Identification as a process of incidental learning. Journal of Abnormal and Social Psychology, 63 (1961), 311-318.

6. Bandura, Albert, and Mischel, Walter. Modification of self-imposed delay of reward through exposure to live and symbolic models. Journal of Personality and Social Psychology, 2 (1965), 698-70[illegible].

7. Bandura, Albert, Ross, Dorothea, and Ross, Sheila. Transmission of aggression through imitation of aggressive models. Journal of Abnormal and Social Psychology, 63, 3 (1961), 572-582.

8. Bandura, Albert, Ross, Dorothea, and Ross, Sheila. Imitation of film-mediated aggressive models. Journal of Abnormal and Social Psychology, 66, 1 (1963), 3-11.

9. Bandura, Albert, Ross, Dorothea, and Ross, Sheila. Vicarious reinforcement and imitative learning. Journal of Abnormal and Social Psychology, 67 (1963), 601-607.

10. Bandura, Albert, and Walters, Richard H. Social learning and personality development. New York: Holt, Rinehart and Winston, 1963.

11. Berkowitz, Leonard. Aggression: a social-psychological model. New York: McGraw-Hill, 1962b.

12. Berkowitz, Leonard. The concept of aggressive drive: some additional considerations. In Berkowitz, L., ed. Advances in experimental psychology, 2 (1965), 301-329. New York: Academic Press, 1965.

13. Berkowitz, Leonard. Violence in the mass media. In Paris-Stanford studies in communication (Paris and Stanford: Institut Francais de Presse, University of Paris, and Institute for Communication Research, Stanford University, 1962a), pp. 107-137.

14. Berkowitz, Leonard, Corwin, R., and Heironomous, M. Film violence and subsequent aggressive tendencies. Public Opinion Quarterly, 27 (1963), 217-229.

15. Berkowitz, Leonard, and Rawlings, Edna. Effects of film violence on inhibitions against subsequent aggression. Journal of Abnormal and Social Psychology, 66 (1963), 405-412.

16. Block, H. A., and Flynn, F. T. Delinquency: the juvenile offense in America today. New York: Random House, 1956.

17. Blumer, Herbert. Movies and conduct. New York: Macmillan, 1933.

18. Brini, A., and Redslob, E. Les mefaits de la symphonie pastorale. (Harmful effects of "La Symphonie Pastorale," a film). Annales d'occultistique, 106 (1947), 104-106.

19. Brodbeck, A. J. The mass media as a socializing agency. Manuscript paper read to symposium on children and the mass media, American Psychological Association, San Francisco, 1955.

20. Bruel, Oluf. Psychic trauma through the cinema: an illustrative case. International Journal of Sexology, 7 (1953), 61-63.

21. Charters, W. W. Motion pictures and youth: a summary. New York: Macmillan, 1935.

22. Doob, Anthony Newcomb. Some determinants of aggression. Doctoral dissertation, Stanford University, August 1967.

23. Emery, F. E., and Martin, D. Psychological effects of the western film -- a study of television viewing. Melbourne Department of Audio-Visual Aids, University of Melbourne, 1957.

24. Feshbach, Seymour. Aggression. Pre-print of chapter in Charmichael, ed., Manual of Child Psychology. In press.

25. Feshbach, Seymour. The catharsis hypothesis and some consequences of interaction with aggressive and neutral play objects. Journal of Personality, 24 (1956), 449-462.

26. Feshbach, Seymour. The drive reducing function of fantasy behavior. Journal of Abnormal and Social Psychology, 50 (1955), 3-11.

27. Feshbach, Seymour. The stimulating vs. cathartic effects of a vicarious aggressive activity. Journal of Abnormal and Social Psychology, 63 (1961), 381-385.

28. Freedman, Lawrence Z. Daydream in a vacuum tube. In Schramm, Lyle, Parker, Television in the lives of our children (q.v.) pp. 189-194.

29. Furu, Takeo. Television and children's life: a before-after study. (In Japanese). Tokyo: NHK Radio and Television Culture Research Institute, 1962.

30. Glynn, Eugene David. Television and the American character -- a psychiatrist looks at television. In Eliot, William Y., ed. Television's impact on American culture. East Lansing: Michigan State University Press, 1956.

31. Haines, William H. Juvenile delinquency and television. Journa of Social Therapy, 1 (1955), 192-198.

32. Hale, Gordon A., Miller, Leon K., and Stevenson, Harold W. Incidental learning of film content; a developmental study. Child Development, 39, 1 (1968), 69-78.

33. Hartley, Ruth L. The impact of viewing "aggression": studies and problems of extrapolation. Manuscript, Columbia Broadcasting System, 1964.

34. Hartman, Donald P. The influence of symbolically modeled instrumental aggressive and pain cues on the disinhibition of aggressive behavior. Doctoral dissertation, Stanford University, May 1965.

35. Heimich, Karl. Filmerleben, Filmwirkung, Filmerziehung - Der Einfluss des Films auf die Aggressivitat bei Jugendlichen. Experimentelle Untersuchungen und ihre lernpsychologischen Konsequenzen. (Film experience, film effects, film education. The influence of film on aggressiveness of youth. Experiments and consequences for the psychology of learning.) Hannover, Darmstadt: H. Schroedel, 1961.

36. Hicks, David J. Effects of co-observer's sanctions and adult presence on imitative aggression. Child Development, 39, 1 (1968), 303-309.

37. Hicks, David J. Imitation and retention of film-mediated aggressive peer and adult models. Journal of Personality and Social Psychology, 2 (1965), 97-100.

38. Himmelweit, Hilde, Oppenheim, A. N., and Vince, Pamela. Television and the child. London: Oxford, 1958.

39. Holaday, Perry W., and Stoddard, George D. Getting ideas from the movies. New York: Macmillan, 1933.

40. Keilhacker, Martin, and Keilhacker, Margarete. Jugend und Spielfilm. Erlebnisse und Einflusse. (Youth and the story film. How young people experience films and are influenced by them.) Stuttgart: Ernst Klett Verlag, 1953.

41. Keilhacker, Martin, Brudny, Wolfgang, and Lammers, Paul. Kinder sehen Filme. (Children see films.) Munich: Ehrenwirth Verlag, 1957.

42. Klapper, Joseph T. The effects of media-depicted violence: a review of research findings. Unpublished manuscript, Columbia Broadcasting System, 1968.

43. Kuhn, Deanna Zipse, Madsen, Charles H., Jr., and Becker, Wesley C. Effects of exposure to an aggressive model and "frustration" on children's aggressive behavior. Child Development, 38, 3 (1967), 739-746.

44. Lardner, Diane L. Effects of aggressive story content on non-verbal play behavior. Psychological Reports, 11 (1962), 14.

45. Logan, S. C. What our children see. Institute for Education by Radio Yearbook, 1950, 170-174.

46. Lovaas, O. J. Effect of exposure to symbolic aggression on aggressive behavior. Child Development, 32 (1961), 37-44.

47. Maccoby, Eleanor E. Effects of the mass media. In Review of Child Development Research, 1 (1964), pp. 323-348.

48. Maccoby, Eleanor E. Role-taking in childhood and its consequences for social learning. Child Development, 30 (1959), 239-252.

49. Maccoby, Eleanor E. Why do children watch television? Public Opinion Quarterly, 18 (1954), 239-244.

50. Maccoby, Eleanor E., Levin, H., and Selya, B. M. The effect of emotional arousal on the retention of aggressive and non-aggressive movie content. American Psychologist, 10 (1955), 359.

51. Maccoby, Eleanor E., Levin, H., and Selya, B. M. The effects of emotional arousal on the retention of film content: a failure to replicate. Journal of Abnormal and Social Psychology, 53 (1956), 373-374.

52. Maccoby, Eleanor E., and Wilson, W. C. Identification and observational learning from film. Journal of Abnormal and Social Psychology, 55 (1957), 76-87.

53. Maccoby, Eleanor E., Wilson, W. C., and Burton, R. V. Differential movie-viewing behavior of male and female viewers. Journal of Personality, 26 (1958), 259-267.

54. Mussen, P. H., and Rutherford, E. Effects of aggressive cartoons on children's aggressive play. Journal of Abnormal and Social Psychology, 62 (1961), 461-464.

55. Paulsen, Kathe. Was bleibt? Kinder besinnen sich auf einem Film. (What remains? Children recall a film.) Film-Bild-Ton, 7 (1957), 8-13.

56. Peterson, Ruth C., and Thurstone, L. L. Motion pictures and the social attitudes of children. New York: Macmillan, 1933.

57. Preston, M. I. Children's reactions to movie horrors and radio crime. Journal of Pediatrics, 19 (1941), 147-168.

58. Riley, Matilda W., and Riley, John W., Jr. A sociological approach to communication research. In Schramm, W., ed., The process and effects of mass communication. Urbana, Illinois: University of Illinois Press, 1954.

59. Roberts, Donald F. A developmental study of opinion change: source-orientation vs. content-orientation at three age levels. Doctoral dissertation, Stanford University, 1968.

60. Ruckmick, Christian A., and Dysinger, Wendell S. The emotional responses of children to the motion picture situation. New York: Macmillan, 1933.

61. Schramm, W., Lyle, J., and Parker, E. B. Television in the lives of our children. Stanford, California: Stanford University Press, 1961.

62. Shuttleworth, F. K., and May, M. A. The social conduct and attitudes of movie fans. New York: Macmillan, 1933.

63. Siegel, Alberta E. Film-mediated fantasy aggression and strength of aggressive drive. Child Development, 27 (1956), 365-378.

64. Siegel, Alberta E. The influence of violence in the mass media upon children's role expectations. Child Development, 29 (1958), 35-56.

65. Unesco. The influence of the cinema on children and adolescents; an annotated international bibliography. Paris: Unesco, Reports and Papers on Mass Communication, No. 31, 1961.

66. Unesco. The influence of television on children and adolescents. Paris: Reports and Papers on Mass Communication, No. 43, 1964.

67. Walters, R. H., Bowen, Norma, and Parke, R. D. Experimentally induced disinhibition of sexual responses. Unpublished manuscript, University of Waterloo, 1963. Cited in Bandura and Walters (q.v.), 1963.

68. Walters, R. H., and Llewellyn Thomas, T. Enhancement of punitiveness by visual and audiovisual displays. Canadian Journal of Psychology, 17 (1963), 244-255.

69. Walters, R. H., and Willows, Donna C. Imitative behavior of disturbed and nondisturbed children following exposure to aggressive and nonaggressive models. Child Development, 39 (1968), 79-90.

70. Zochbauer, Franz. Von neuen Gottern. Zur Problematik des Starkulten. (Of new gods. Problems of film-star cults.) Jugend und Film, 1 (1958), 12.